

ABSTRACT OF THE DISCLOSURE

A method and apparatus for producing gas, for example for propulsion. Propellant grains are segmented, preferably in symmetrically arranged pairs and preferably about a central channel extending longitudinally between the
5 ends of the grains. Longitudinally extending grains may be ignited at one end only of each grain, at both ends, and/or at one or both ends along with at an interior portion of a grain. In order to maintain a relatively constant center of gravity, symmetrically arranged pairs of grains can be ignited simultaneously. In order to produce a desired pressure versus time profile, the number of
10 ignition points on a grain can be varied.